

REMARKS

Status of the Claims

Claims 1, 4, 5, 8-13, and 16-24 are now present in this application. Claim 1 is the sole independent claim.

Claims 1, 4, 5, 10, and 11 have been amended. Reconsideration of this application, as amended, is respectfully requested.

Objection to the Drawings

Applicants thank the Examiner for withdrawing the objection to the drawings set forth in the Office Action dated September 14, 2009. Accordingly, no outstanding issues remain with respect to the drawings.

Claim Objections

The Examiner has objected to claims 1, 4, 5, 8-13, and 16-24 because of several informalities. In order to overcome this objection, Applicants have amended claims 1, 4, 5, 10, and 11 in order to correct the deficiencies pointed out by the Examiner. Reconsideration and withdrawal of this objection are respectfully requested.

Rejections under 35 U.S.C. §103

Claims 1, 4, 5, 8, and 9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Harushige (JP 2003-314856) in view of Lapeyre et al. (US 4,424,686). Further, claims 10-13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Harushige in view of Lapeyre, and further in view of Hosoda et al. (US 3,805,542). Further, claims 16-24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Harushige in view of Lapeyre, and further in view of Maeda et al. These rejections are respectfully traversed.

Complete discussions of the Examiner's rejections are set forth in the Office Action, and are not being repeated here.

While not conceding the appropriateness of the Examiner's rejection, but merely to advance prosecution of the instant application, Applicants respectfully submit that independent

claim 1 has been amended to recite a combination of elements in a humidity control system including

a refrigerant circuit which includes a first and a second adsorbent-supported heat exchangers, which are both fluidly connected in the refrigerant circuit to perform a refrigeration cycle, and which is capable of reversing the circulation direction of a refrigerant;

a box-shaped casing internally having an air passageway in which the heat exchangers are disposed;

...wherein

an air supplying fan and an air exhausting fan which are disposed in the casing

a compressor and a reversal mechanism for reversing the circulation direction of refrigerant in the refrigerant circuit are disposed between the air supplying fan and the air exhausting fan in the first space of the casing.

the compressor is disposed in the air passageway of the casing, and

the compressor is disposed downstream of the first and second heat exchangers in the air passageway along the route of the air stream supplied to the indoor space

(emphasis added).

Applicants respectfully submit that this combination of elements as set forth in independent claim 1 is not disclosed or made obvious by the prior art of record, including Harushige and Lapeyre.

In the rejection, the Examiner acknowledges that “Harushige fails to explicitly disclose that the compressor and reversal mechanism are disposed between the air supplying fan and the air exhausting fan in the first space of the casing, where the compressor is disposed in the air passageway of the casing and downstream of the first and second heat exchangers” (Office Action at paragraph bridging pages 3-4). However, the Examiner goes on to assert the following:

“At the time the invention was made, however, it would have been an obvious matter of design choice to a person of ordinary skill in the art to position the compressor and reversal mechanism between the air supplying fan and the air exhausting fan in the first space of the humidity control system disclosed by Harushige because Applicant has not disclosed that doing so provides an [sic] new

advantage, is used for a particular and unobvious purpose, or solves a newly stated problem”

(*id.*).

Applicants respectfully disagree with this assertion by the Examiner.

For instance, Applicants submit that the original specification describes particular advantages to disposing the compressor in the internal air passageway of the casing because

“...For example, if the compressor (63) is disposed along the distribution route of air which is supplied to the indoor space, this gives rise to a raise in air temperature, thereby improving the room heating effect. This is therefore advantageous for humidity control systems designed to give priority to the heating effect....”

(specification at paragraph [0020], page 6).

Thus, Applicants have clearly disclosed a particular advantage for the claimed disposition of the compressor in the internal air passageway of the humidity casing, e.g., along the distribution route of the air supplied to the indoor space. Specifically, it allows for a rise in air temperature to improve a room heating effect.

In order to make this advantage even clearer, Applicants have amended independent claim 1 to clarify that “the compressor is disposed downstream of the first and second heat exchangers in the air passageway *along the route of the air stream supplied to the indoor space*” (emphasis added).

In the Office Action, the Examiner further asserts that “Lapeyre discloses positioning a compressor within an air passageway so that the airstream flows over the compressor” (Office Action at page 5, last paragraph). However, the claimed invention requires disposing the condenser in an air passageway in which the first and second heat exchangers are disposed, and disposing the condenser *downstream* of the first and second heat exchangers *along the air stream supplied to the indoor space*. Even if one were consider Lapeyre’s evaporator coils 14 and condenser coils 12 as being analogous to the claimed first and second heat exchangers, respectively, Lapeyre’s compressor 16 is *not* disposed in the air passageway downstream of both types of coils along any route supplying an airstream to the indoor part of the room (see Fig. 1). Thus, Lapeyre fails to cure the deficiencies of Harushige with regard to the claimed disposition of the compressor.

Applicants respectfully submit that the combination of elements as set forth in independent claim 1 is not disclosed or made obvious by Harushige and Lapeyre, when considered separately or in obvious combination, at least for the reasons explained above. Furthermore, it is respectfully submitted that neither Hosoda nor Maeda remedies the deficiencies of Harushige and Lapeyre. Accordingly, Applicants submit that independent claim 1 is in condition for allowance. Reconsideration and withdrawal of this rejection are thus respectfully requested.

With regard to dependent claims 4, 5, 8-13, and 16-24, Applicants submit that these claims depend, either directly or indirectly, from independent claim 1 which is allowable for the reasons set forth above. Therefore claims 4, 5, 8-13, and 16-24 are allowable based on their dependence from claim 1. Reconsideration and allowance thereof are respectfully requested.

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Jason W. Rhodes (Registration No. 47305) at the telephone number of the undersigned below to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Director is hereby authorized in this, concurrent, and future replies to charge any fees required during the pendency of the above-identified application or credit any overpayment to Deposit Account No. 02-2448.

Dated: September 9, 2010

Respectfully submitted,

b67

By 
D. Richard Anderson
Registration No.: 40439
BIRCH, STEWART, KOLASCH & BIRCH, LLP
8110 Gatehouse Road, Suite 100 East
P.O. Box 747
Falls Church, VA 22040-0747
703-205-8000